Abstract of the Disclosure

An apparatus and method for measuring spatially varying bidirectional reflectance distribution function and method are provided. The apparatus and method provide means to illuminate different areas of a sample at different angles of incidence and detect the angular variation of radiation emitted from the sample in response to the illumination. The apparatus includes a paraboloidal reflector for delivering the illumination and receiving the radiation emitted by the sample, a radiation source for generating a beam of collimated radiation, a beam steering device for controlling the angle of incidence with which the focused cone of light strikes the sample, and a detector to receive the collected light from the reflector.